

SEQUENCE LISTING

<110> Gregory M. Landes  
Mary Haak-Frendscho  
Ling Chen  
Yen-Wah R. Lee  
Meina Liang  
Xiao Feng  
Xiao-Chi Jia  
Mark R. Nocerini

<120> ANTIBODIES DIRECTED TO PHOSPHOLIPASE A2  
AND USES THEREOF

<130> ABGENIX.072A

<140> Unknown  
<141> 2003-12-01

<150> n/a  
<151>

<160> 222

<170> FastSEQ for Windows Version 4.0

<210> 1  
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<213> Homo sapiens

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ggtgagcggtt ggaggggctg ggggagtaat aacatcaaaa gagcgccttt tcctccctta 180  
ttccgaggag acttccctgg gcctgactcc cggtcctgtc cccagcgcggc cgccggctct 240  
ggagccccctt cagtgaccaa gatacagaga tcaggacgcc tttcgccggc cccaggtgcc 300  
cgcccccttagc tggctctgtc tggccgcga gggaaaggta ggtcgggggc ggagccgggg 360  
cgtgacagcc ggggtgtgtc tccgcggggc ttggtgccctc cggtgtggcctt gcagcacccgt 420  
cccaccccttg ccaccctccg atggggccgc tacctgtgtc cctgccaatc atgctgctcc 480  
tgctactgcc gtcgctgtc ctgctgtc ttctacctgg ccccggtcc ggcgaggcct 540  
ccagggatatt acgtgtgcac cggcggtggta tccttggaaact ggcaggaaact gtgggttgt 600  
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atggccagcc cgcgcgtgcc attgactgtt gtcgcattgg ccacgactgt tggcacactc 720  
gagctgagga ggccggctgc agcccccaaga cagagcgcta ctcctggcag tgcgtcaatc 780  
agagcgtcct gtgcggaccg gcagagaaca aatgccaaga actgttgtc aagtgtgacc 840  
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agttcctatg tgagccggac tcgccccaaatgtgactgtacccctt gaaatgtct 960  
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<210> 2  
<211> 165  
<212> PRT  
<213> Homo sapiens

<400> 2

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								20	25				30		
Ala	Ser	Arg	Ile	Leu	Arg	Val	His	Arg	Arg	Gly	Ile	Leu	Glu	Leu	Ala
							35	40				45			
Gly	Thr	Val	Gly	Cys	Val	Gly	Pro	Arg	Thr	Pro	Ile	Ala	Tyr	Met	Lys
							50	55				60			
Tyr	Gly	Cys	Phe	Cys	Gly	Leu	Gly	Gly	His	Gly	Gln	Pro	Arg	Asp	Ala
						65	70				75		80		
Ile	Asp	Trp	Cys	Cys	His	Gly	His	Asp	Cys	Cys	Tyr	Thr	Arg	Ala	Glu
							85				90		95		
Glu	Ala	Gly	Cys	Ser	Pro	Lys	Thr	Glu	Arg	Tyr	Ser	Trp	Gln	Cys	Val
						100		105					110		
Asn	Gln	Ser	Val	Leu	Cys	Gly	Pro	Ala	Glu	Asn	Lys	Cys	Gln	Glu	Leu
						115		120				125			
Leu	Cys	Lys	Cys	Asp	Gln	Glu	Ile	Ala	Asn	Cys	Leu	Ala	Gln	Thr	Glu
						130		135				140			
Tyr	Asn	Leu	Lys	Tyr	Leu	Phe	Tyr	Pro	Gln	Phe	Leu	Cys	Glu	Pro	Asp
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Ser	Pro	Lys	Cys	Asp											
					165										

<210> 3  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 3

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Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Ser	Phe	Ile	Ser	Tyr
							20			25			30		
Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
							35			40			45		
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
							50			55			60		
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
							65			70			75		80
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
							85			90			95		
Ala	Arg	His	Trp	Ser	Tyr	Gly	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr
							100			105			110		
Val	Thr	Val	Ser	Ser	Ala										
					115										

<210> 4  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 4

Glu	Ile	Val	Leu	Thr	Gln	Ser	Pro	Gly	Thr	Leu	Ser	Leu	Ser	Pro	Gly
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Arg Ser Gly  
     20                       25                       30  
 Tyr Leu Ala Trp Tyr Gln Gln Arg Pro Gly Gln Ala Pro Arg Phe Leu  
     35                       40                       45  
 Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
     50                       55                       60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
     65                       70                       75                       80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
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 Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Lys Arg  
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<210> 5  
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 <212> PRT  
 <213> Homo sapiens

<400> 5  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
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 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Ile Ser Tyr  
     20                       25                       30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
     35                       40                       45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
     50                       55                       60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
     65                       70                       75                       80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
     85                       90                       95  
 Ala Arg Ser Trp Thr Tyr Ala Leu Asp Val Trp Gly Gln Gly Thr Ala  
     100                       105                       110  
 Val Thr Val Ser Ser Ala  
     115

<210> 6  
 <211> 109  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
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 Glu Arg Ala Thr Leu Ser Cys Arg Pro Ser Gln Ser Val Arg Ser Asn  
     20                       25                       30  
 Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
     35                       40                       45  
 Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
     50                       55                       60  
 Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Val Ser Arg Leu Glu  
     65                       70                       75                       80  
 Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
     85                       90                       95  
 Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Lys Arg

100

105

<210> 7  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 7  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Ile Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg His Ser Gly Ser Ser Phe Asp Tyr Trp Gly Gln Gly Thr Leu  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 8  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 8  
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
1 5 10 15  
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
20 25 30  
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
35 40 45  
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Tyr Arg Ala Ser Gly Val Pro  
50 55 60  
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
65 70 75 80  
Ser Arg Val Glu Ala Glu Asp Ala Gly Val Tyr Phe Cys Met Gln Gly  
85 90 95  
Leu Lys Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg  
100 105 110

<210> 9  
<211> 117  
<212> PRT  
<213> Homo sapiens

<400> 9  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15

Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Asn Tyr  
     20                       25                               30  
 Trp Ile Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
     35                       40                               45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
     50                       55                               60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
     65                       70                               75                       80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
     85                       90                               95  
 Ala Arg His Arg Leu Gly Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val  
     100                       105                               110  
 Thr Val Ser Ser Ala  
     115

<210> 10  
 <211> 108  
 <212> PRT  
 <213> Homo sapiens

<400> 10  
 Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
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 Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
     20                       25                               30  
 Leu Asp Trp Cys Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile  
     35                       40                               45  
 Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
     50                       55                               60  
 Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
     65                       70                               75                       80  
 Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Asn Tyr Pro Pro  
     85                       90                               95  
 Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg  
     100                       105

<210> 11  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<400> 11  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
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 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Arg Phe Thr Ser Tyr  
     20                       25                               30  
 Trp Ile Ser Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
     35                       40                               45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
     50                       55                               60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
     65                       70                               75                       80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
     85                       90                               95  
 Ala Arg His Arg Glu Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val

100 105 110  
Thr Val Ser Ser Ala  
115

<210> 12  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 12  
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Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
20 25 30  
Asn Gly Tyr Asn Phe Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
35 40 45  
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
50 55 60  
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
65 70 75 80  
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
85 90 95  
Leu Gln Thr Pro Pro Thr Phe Gly Pro Gly Thr Lys Val Glu Ile Lys  
100 105 110  
Arg

<210> 13  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 13  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg Ser Trp Thr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 14  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 14

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
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Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Arg Ser Asn  
20 25 30  
Tyr Leu Thr Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
35 40 45  
Ile Tyr Gly Ala Ser Thr Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
50 55 60  
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
65 70 75 80  
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
85 90 95  
Leu Thr Phe Gly Gly Gly Thr Lys Val Glu Ile Lys Arg  
100 105

<210> 15

<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 15

Gly Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Asn Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Ile Tyr Tyr Cys  
85 90 95  
Ala Arg Gly Gly Val Gly Ala Phe Asp Ile Trp Gly Gln Gly Thr Met  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 16

<211> 110  
<212> PRT  
<213> Homo sapiens

<400> 16

Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
1 5 10 15  
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ile Ile Arg Arg Ser  
20 25 30  
Ser Leu Ala Trp Tyr Gln Glu Lys Pro Gly Gln Ala Pro Arg Leu Leu  
35 40 45  
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
50 55 60  
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu

65	70	75	80
Pro	Glu Asp Phe Ala Val Tyr Tyr Cys Gln	Gln Tyr Gly Ser Ser	Pro
	85	90	95
Pro	Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg		
	100	105	110

<210> 17  
<211> 118  
<212> PRT  
<213> *Homo sapiens*

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<400> 17
Glu Val Gln Leu Val Gln Ser Gly Ala Gly Val Lys Lys Pro Gly Glu
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Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr
      20          25          30
Trp Ile Asn Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met
      35          40          45
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe
      50          55          60
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr
      65          70          75          80
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys
      85          90          95
Ala Arg Ser Thr Ser Ser Ala Phe Asp Ile Trp Gly Gln Gly Thr Met
      100         105         110
Val Thr Val Ser Ser Ala
      115

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<210> 18  
<211> 108  
<212> PRT  
<213> *Homo sapiens*

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<400> 18
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
      1           5           10          15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Arg Tyr
      20          25          30
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
      35          40          45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly
      50          55          60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
      65          70          75          80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro
      85          90          95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg
      100         105

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<210> 19  
<211> 118  
<212> PRT  
<213> *Homo sapiens*

<400> 19

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Asn Phe Ile Thr Tyr  
20 25 30  
Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Leu Thr Gly Thr Arg Ala Phe Glu Ile Trp Gly Gln Gly Thr Met  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 20

<211> 111  
<212> PRT  
<213> Homo sapiens

<400> 20

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Tyr  
20 25 30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Pro Gly Lys Gly Pro Lys  
35 40 45  
Leu Leu Ile Tyr Ala Ala Ser Thr Leu Gln Ser Gly Val Pro Ser Arg  
50 55 60  
Phe Ser Gly Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Arg Ser  
65 70 75 80  
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Phe Asn  
85 90 95  
Thr Pro Pro Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg  
100 105 110

<210> 21

<211> 119  
<212> PRT  
<213> Homo sapiens

<400> 21

Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20 25 30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr

65                   70                   75                   80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
              85                   90                   95  
Ala Arg Arg Asp Trp Asn Tyr Ala Phe Asp Ile Trp Gly Gln Gly Thr  
              100                   105                   110  
Met Val Thr Val Ser Ser Ala  
              115

<210> 22  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 22  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1               5               10               15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Asn Tyr  
20              25              30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Phe Leu Ile  
35              40              45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Ala Pro Ser Arg Phe Ser Gly  
50              55              60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65              70              75              80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Ile  
85              90              95  
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg  
100             105

<210> 23  
<211> 121  
<212> PRT  
<213> Homo sapiens

<400> 23  
Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg  
1               5               10               15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20              25              30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35              40              45  
Ala Ala Ile Trp Tyr Asp Gly Ser Asn Lys Trp Tyr Ala Asp Ser Val  
50              55              60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65              70              75              80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
              85              90              95  
Ala Arg Gly Gly Thr Gly Thr Pro Gly Ala Phe Asp Ile Trp Gly Gln  
              100             105             110  
Gly Thr Met Val Thr Val Ser Ser Ala  
              115             120

<210> 24  
<211> 112

<212> PRT

<213> Homo sapiens

<400> 24

Asp	Ile	Val	Met	Thr	Gln	Ser	Pro	Leu	Ser	Leu	Pro	Val	Thr	Pro	Gly
1					5				10					15	
Glu	Pro	Ala	Ser	Ile	Ser	Cys	Arg	Ser	Ser	Gln	Ser	Leu	Leu	His	Ser
					20				25					30	
Asn	Gly	Tyr	Asn	Tyr	Leu	Asp	Trp	Tyr	Leu	Gln	Lys	Pro	Gly	Gln	Ser
					35				40			45			
Pro	Gln	Leu	Leu	Ile	Tyr	Leu	Gly	Ser	Asn	Arg	Ala	Ser	Gly	Val	Pro
					50				55			60			
Asp	Arg	Phe	Ser	Gly	Ser	Gly	Ser	Gly	Thr	Asp	Phe	Thr	Leu	Lys	Ile
					65				70			75		80	
Ser	Arg	Met	Glu	Ala	Glu	Asp	Val	Gly	Val	Tyr	Tyr	Cys	Met	Gln	Ala
					85				90			95			
Leu	Gln	Thr	Ile	Thr	Phe	Gly	Gln	Gly	Thr	Arg	Leu	Glu	Ile	Lys	Arg
					100				105			110			

<210> 25

<211> 121

<212> PRT

<213> Homo sapiens

<400> 25

Gln	Val	Gln	Leu	Glu	Glu	Ser	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg	
1						5			10				15		
Ser	Leu	Arg	Leu	Ser	Cys	Ala	Ala	Ser	Gly	Phe	Thr	Phe	Ser	Ser	Tyr
						20			25			30			
Gly	Met	His	Trp	Val	Arg	Gln	Gly	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Val
						35			40			45			
Ala	Val	Ile	Trp	Tyr	Asp	Gly	Ser	Asn	Lys	Lys	Tyr	Ala	Asp	Ser	Val
						50			55			60			
Lys	Gly	Arg	Phe	Thr	Ile	Ser	Arg	Asp	Asn	Ser	Lys	Asn	Thr	Leu	Tyr
						65			70			75		80	
Leu	Gln	Met	Asn	Ser	Leu	Arg	Ala	Glu	Asp	Thr	Ala	Val	Tyr	Tyr	Cys
						85			90			95			
Ala	Arg	Asp	Gly	Pro	Ile	Phe	Gly	Val	Val	Met	Gly	Tyr	Trp	Gly	Gln
					100				105			110			
Gly	Thr	Leu	Val	Thr	Val	Ser	Ser	Ala							
					115				120						

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<211> 108

<212> PRT

<213> Homo sapiens

<400> 26

Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ser	Ser	Leu	Ser	Ala	Ser	Val	Gly
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Asp	Arg	Val	Thr	Ile	Thr	Cys	Arg	Thr	Ser	Gln	Ser	Ile	Ser	Asn	Tyr
						20			25			30			
Leu	Asn	Trp	Phe	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Ile	Leu	Leu	Ile
						35			40			45			
Tyr	Ala	Ala	Ser	Ser	Leu	Gln	Ser	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly

50	55	60
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro		
65	70	75
Glu Asp Phe Ala Thr Tyr Tyr Cys His Gln Ser Tyr Ser Ile Pro Ile		80
85	90	95
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg		
100	105	

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<211> 118  
<212> PRT  
<213> Homo sapiens

1	5	10	15
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Ile Ser Tyr			
20	25	30	
Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met			
35	40	45	
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Arg Tyr Ser Pro Ser Phe			
50	55	60	
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr			
65	70	75	80
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys			
85	90	95	
Ala Arg Thr Thr Ser Asp Ala Phe Asp Ile Trp Gly Gln Gly Thr Met			
100	105	110	
Val Thr Val Ser Ser Ala			
115			

<210> 28  
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<212> PRT  
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1	5	10	15
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr			
20	25	30	
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile			
35	40	45	
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly			
50	55	60	
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro			
65	70	75	80
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Asn Thr Pro Pro			
85	90	95	
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg			
100	105		

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<212> PRT  
<213> Homo sapiens

<400> 29  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ile Tyr  
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35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Gln Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg His Asp Ser Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr  
100 105 110  
Val Thr Val Ser Ser Ala  
115

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<220>  
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Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Leu Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg Ser Thr Ser Xaa Ala Phe Asp Ile Trp Gly Gln Gly Thr Met  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 31  
<211> 118  
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<400> 31

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23

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<213> Homo sapiens
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<400> 33  
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24

<210> 34  
<211> 19  
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<213> *Homo sapiens*

<400> 34  
cacaccgcgg tcacatggc

19

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<210> 35  
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<212> DNA  
<213> Homo sapiens
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<400> 35  
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20

<210> 36  
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<210> 38		
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gtatacggtt ggctgg		16
<210> 39		
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<212> DNA		
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<212> DNA		
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gggtatagca gt		12
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<213> Homo sapiens		
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ctggaactac	10	
<210> 44		
<211> 15		
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ggatacagct atggc	15	
<210> 45		
<211> 13		
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ctggaactac	10	
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ggatacagct atggc	15	
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<210> 52  
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<400> 52  
Phe Ile Ser Gly Ser Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
1 5 10 15  
Gly

<210> 53  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 53  
Lys Gly Asp Trp Asn Tyr Glu Asp Tyr  
1 5

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<400> 54  
Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Gly  
1 5 10

<210> 55  
<211> 17  
<212> PRT  
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<400> 55  
Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe Gln  
1 5 10 15  
Gly

<210> 56  
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<400> 56  
Leu Gly Pro Thr Pro Phe Asp Tyr  
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<400> 57  
Gly Tyr Thr Phe Thr Asp Tyr Tyr Ile His  
1 5 10

<210> 58  
<211> 17  
<212> PRT  
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<400> 58  
Trp Ile His Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln  
1 5 10 15  
Gly

<210> 59  
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<212> PRT  
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<400> 59  
Asp Arg Asp Thr Ala Met Val Phe Tyr Tyr Tyr Tyr Ala Met Asp  
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Val

<210> 60  
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<400> 60  
Gly Asp Ser Val Ser Ser Asn Ser Ala Ala Trp Asn  
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<210> 61  
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<212> PRT  
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<400> 61  
Arg Thr Tyr Tyr Arg Ser Lys Trp Tyr Asn Asp Tyr Ala Val Ser Val  
1 5 10 15  
Lys Ser

<210> 62  
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<400> 62  
Gly Glu Tyr Ser Gly Gly Trp Asn Phe Tyr Tyr Tyr Gly Met Asp Val  
1 5 10 15

<210> 63  
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Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser  
1 5 10

<210> 64  
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<400> 64  
Ala Ile Ser Gly Ser Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
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Gly

<210> 65  
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<400> 65  
Glu Gly Val Thr Thr Ile Phe Tyr Trp Tyr Phe Asp Leu  
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<400> 66  
Gly Gly Ser Ile Ser Ser Gly Gly Tyr Tyr Trp Ser  
1 5 10

<210> 67  
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Tyr Ile Tyr Tyr Ser Gly Ser Thr Tyr Tyr Asn Pro Ser Leu Lys Ser  
1 5 10 15

<210> 68  
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<212> PRT  
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<400> 68  
Glu Val Ile Val Ala Arg Pro Trp Phe Asp Pro  
1 5 10

<210> 69  
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<400> 69  
Gly Phe Thr Phe Ser Ile Tyr Gly Met His  
1 5 10

<210> 70  
<211> 17  
<212> PRT  
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<400> 70  
Ile Ile Ser Tyr Gly Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys  
1 5 10 15  
Gly

<210> 71  
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<400> 71  
Glu Ile Ala Ala Ala Gly Ser Ser Gly Met Asp Val  
1 5 10

<210> 72  
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<212> PRT  
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<400> 72  
Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Gly  
1 5 10

<210> 73  
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<400> 73  
Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe Gln  
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Gly

<210> 74  
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<400> 74  
Pro Pro Pro Gly Ile Ala Val Pro Phe Lys Asp Tyr  
1 5 10

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<400> 75  
Gly Phe Thr Phe Ser Ser Tyr Gly Met His  
1 5 10

<210> 76  
<211> 17  
<212> PRT  
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<400> 76  
Ile Ile Trp Tyr Asp Gly Ser Tyr Arg Phe Tyr Ala Asp Ser Val Lys  
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<210> 77  
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<400> 77

Arg Gly Phe Asp Tyr  
1 5

<210> 78

<211> 10

<212> PRT

<213> Homo sapiens

<400> 78

Gly Phe Thr Phe Ser Ser Tyr Ser Met Asn  
1 5 10

<210> 79

<211> 17

<212> PRT

<213> Homo sapiens

<400> 79

Tyr Ile Ser Ser Gly Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val Lys  
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Gly

<210> 80

<211> 17

<212> PRT

<213> Homo sapiens

<400> 80

Glu Gly Leu Glu Leu Arg Arg Gly Tyr Tyr Tyr Tyr Gly Met Asp  
1 5 10 15  
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<210> 81

<211> 10

<212> PRT

<213> Homo sapiens

<400> 81

Gly Tyr Thr Phe Thr Gly Tyr Tyr Met His  
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<210> 82

<211> 17

<212> PRT

<213> Homo sapiens

<400> 82

Trp Ile Asn Pro Asn Ser Gly Gly Thr Asn Tyr Ala Gln Lys Phe Gln  
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Gly

<210> 83  
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<400> 83  
Asp Arg Asp Thr Ala Met Val Phe Tyr Tyr Tyr Tyr Ala Leu Asp  
1 5 10 15  
Val

<210> 84  
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<212> PRT  
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<400> 84  
Gly Phe Thr Phe Ser Ser Tyr Ala Met Ser  
1 5 10

<210> 85  
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<400> 85  
Ala Ile Ser Gly Ser Gly Ser Thr Tyr Tyr Ala Asp Ser Val Lys  
1 5 10 15  
Gly

<210> 86  
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<212> PRT  
<213> Homo sapiens

<400> 86  
Glu Gly Val Thr Thr Ile Phe Tyr Trp Tyr Phe Asp Leu  
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<210> 87  
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<400> 87  
Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Gly

1

5

10

<210> 88  
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<212> PRT  
<213> Homo sapiens

<400> 88  
Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe Gln  
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Gly

<210> 89  
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<400> 89  
Gln Arg Arg Gly Phe Asp Tyr  
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<210> 90  
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<400> 90  
Gly Tyr Ser Phe Thr Ser Tyr Trp Ile Ala  
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<210> 91  
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Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe Gln  
1 5 10 15  
Gly

<210> 92  
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<400> 92  
Gly Arg Gly Gly Phe Asp Tyr  
1 5

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Gly Phe Thr Phe Ser Thr Tyr Gly Met His  
1 5 10

<210> 94  
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<400> 94  
Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys  
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Gly

<210> 95  
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<400> 95  
Ala Val Ala Gly Thr Gly Ala Phe Asp Ile  
1 5 10

<210> 96  
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Gly Phe Thr Phe Ser Ser Tyr Ser Met Asn  
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<210> 97  
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<400> 97  
Tyr Ile Ser Ser Gly Ser Ser Thr Ile Tyr Tyr Ala Asp Ser Val Lys  
1 5 10 15  
Gly

<210> 98  
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<400> 98

Glu Gly Leu Glu Leu Arg Arg Gly Tyr Tyr Tyr Tyr Gly Met Asp  
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Val

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<212> PRT

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<400> 99

Gly Gly Ser Ile Ser Arg Ser Ser Tyr Tyr Trp Gly  
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<210> 100

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Gly Phe Thr Phe Ser Asn Tyr Gly Ile His  
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Val Ile Trp Tyr Asp Gly Ser Tyr Lys Phe Tyr Ala Asp Ser Val Lys  
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<212> PRT

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Arg Gly Phe Asp Ser  
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<400> 104  
Gly Phe Thr Phe Ser Ser Tyr Gly Met His  
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<210> 105  
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<400> 105  
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<210> 106  
<211> 11  
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<210> 107  
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<210> 108  
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<210> 110  
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<400> 110  
Gly Tyr Thr Phe Asn Asp Tyr Tyr Met His  
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Gly

<210> 112  
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<400> 112  
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Val

<210> 113  
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<400> 113  
Gly Phe Thr Phe Arg Ser Tyr Gly Met His  
1 5 10

<210> 114  
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<400> 114  
Val Ile Ser Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys  
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Gly

<210> 115  
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<400> 115  
Gly Val Tyr Gly Asp Phe Asp Tyr  
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<210> 116  
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<212> PRT  
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<400> 116  
Gly Phe Thr Phe Ser Asn Tyr Gly Met His  
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<210> 117  
<211> 17  
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<400> 117  
Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys  
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Gly

<210> 118  
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<212> PRT  
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<400> 118  
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1 5

<210> 119  
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<400> 119  
Gly Tyr Thr Phe Thr Asp Tyr Tyr Met His  
1 5 10

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<400> 120  
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Gly

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<400> 121  
Asp Arg Asp Thr Ala Met Val Phe Tyr Tyr Tyr Tyr Ala Met Asp  
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Val

<210> 122  
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Gly Phe Thr Phe Ser Ser Tyr Gly Met His  
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Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val Lys  
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Gly

<210> 124  
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<400> 124

Gln Gly Ile Ala Ala Arg Arg Asn Tyr Tyr Tyr Ser Gly Met Asp Val  
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Gly Tyr Thr Phe Thr Ser Tyr Asp Ile Asn  
1 5 10

<210> 126  
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<400> 126  
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Gly

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<400> 127  
Glu Gly Asn Trp Gly Ser Phe Asp Tyr  
1 5

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<400> 128  
Gly Tyr Ser Phe Thr Asn Tyr Trp Ile Gly  
1 5 10

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Gly

<210> 130  
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<212> PRT  
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<400> 130  
His Thr Gly Ala Leu Asp Tyr  
1 5

<210> 131  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 131  
Gly Ile Thr Phe Ser Ser Tyr Gly Met His  
1 5 10

<210> 132  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 132  
Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Val Asp Ser Val Lys  
1 5 10 15  
Gly

<210> 133  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 133  
Arg Gly Pro Leu Tyr Ala Phe Asp Ile  
1 5

<210> 134  
<211> 118  
<212> PRT  
<213> Homo sapiens

<220>  
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<222> 101, 102  
<223> Xaa = Any Amino Acid

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Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
	35	40	45												
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
	50	55	60												
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
	65	70	75	80											
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
	85	90	95												
Ala	Arg	Gly	Gly	Xaa	Xaa	Ala	Phe	Asp	Ile	Trp	Gly	Gln	Gly	Thr	Met
	100	105	110												
Val	Thr	Val	Ser	Ser	Ala										
	115														

<210> 135

<211> 118

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 102

<223> Xaa = Any Amino Acid

<400> 135

Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Glu
1				5				10				15			
Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Ser	Phe	Thr	Ser	Tyr
				20				25			30				
Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
	35			40				45							
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
	50			55			60								
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
	65			70			75			80					
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
	85			90			95								
Ala	Arg	Ser	Ser	Ser	Xaa	Ala	Phe	Asp	Ile	Trp	Gly	Gln	Gly	Thr	Met
	100			105			110								
Val	Thr	Val	Ser	Ser	Ala										
	115														

<210> 136

<211> 121

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> 99, 100, 103, 104, 105

<223> Xaa = Any Amino Acid

<400> 136

Gln	Val	Gln	Leu	Val	Glu	Ser	Gly	Gly	Gly	Val	Val	Gln	Pro	Gly	Arg
1				5			10				15				

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
     20                     25                     30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
     35                     40                     45  
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
     50                     55                     60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
     65                     70                     75                     80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
     85                     90                     95  
 Ala Arg Xaa Xaa Thr Gly Xaa Xaa Xaa Ala Phe Asp Ile Trp Gly Gln  
     100                    105                    110  
 Gly Thr Met Val Thr Val Ser Ser Ala  
     115                    120

<210> 137  
 <211> 119  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> 99, 100  
 <223> Xaa = Any Amino Acid

<400> 137  
 Gln Val Gln Leu Val Glu Ser Gly Gly Val Val Gln Pro Gly Arg  
     1              5                     10                     15  
 Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
     20                     25                     30  
 Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
     35                     40                     45  
 Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
     50                     55                     60  
 Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
     65                     70                     75                     80  
 Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
     85                     90                     95  
 Ala Arg Xaa Xaa Trp Asn Tyr Ala Phe Asp Ile Trp Gly Gln Gly Thr  
     100                    105                    110  
 Met Val Thr Val Ser Ser Ala  
     115

<210> 138  
 <211> 117  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> 99, 100, 102  
 <223> Xaa = Any Amino Acid

<400> 138  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu

1	5	10	15												
Ser	Leu	Lys	Ile	Ser	Cys	Lys	Gly	Ser	Gly	Tyr	Ser	Phe	Thr	Ser	Tyr
20	25	30													
Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
35	40	45													
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
50	55	60													
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
65	70	75	80												
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
85	90	95													
Ala	Arg	Xaa	Xaa	Leu	Xaa	Phe	Asp	Tyr	Trp	Gly	Gln	Gly	Thr	Leu	Val
100	105	110													
Thr	Val	Ser	Ser	Ala											
115															

<210> 139  
<211> 118  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> 101  
<223> Xaa = Any Amino Acid

1	5	10	15												
Glu	Val	Gln	Leu	Val	Gln	Ser	Gly	Ala	Glu	Val	Lys	Lys	Pro	Gly	Glu
20	25	30													
Trp	Ile	Gly	Trp	Val	Arg	Gln	Met	Pro	Gly	Lys	Gly	Leu	Glu	Trp	Met
35	40	45													
Gly	Ile	Ile	Tyr	Pro	Gly	Asp	Ser	Asp	Thr	Arg	Tyr	Ser	Pro	Ser	Phe
50	55	60													
Gln	Gly	Gln	Val	Thr	Ile	Ser	Ala	Asp	Lys	Ser	Ile	Ser	Thr	Ala	Tyr
65	70	75	80												
Leu	Gln	Trp	Ser	Ser	Leu	Lys	Ala	Ser	Asp	Thr	Ala	Met	Tyr	Tyr	Cys
85	90	95													
Ala	Arg	Ser	Trp	Xaa	Tyr	Gly	Met	Asp	Val	Trp	Gly	Gln	Gly	Thr	Thr
100	105	110													
Val	Thr	Val	Ser	Ser	Ala										
115															

<210> 140  
<211> 118  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> 99  
<223> Xaa = Any Amino Acid

<400> 140

Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1               5               10               15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20              25              30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35              40              45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50              55              60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65              70              75              80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85              90              95  
 Ala Arg Xaa Trp Cys Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr  
 100             105             110  
 Val Thr Val Ser Ser Ala  
 115

<210> 141  
 <211> 118  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> 97, 98, 102  
 <223> Xaa = Any Amino Acid

<400> 141  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
 1               5               10               15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
 20              25              30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
 35              40              45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
 50              55              60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
 65              70              75              80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
 85              90              95  
 Xaa Xaa Thr Gly Thr Xaa Ala Phe Asp Ile Trp Gly Gln Gly Thr Met  
 100             105             110  
 Val Thr Val Ser Ser Ala  
 115

<210> 142  
 <211> 121  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> 99, 100  
 <223> Xaa = Any Amino Acid

<400> 142  
Gln Val Gln Leu Val Glu Ser Gly Gly Gly Val Val Gln Pro Gly Arg  
1 5 10 15  
Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe Ser Ser Tyr  
20 25 30  
Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val  
35 40 45  
Ala Val Ile Trp Tyr Asp Gly Ser Asn Lys Tyr Tyr Ala Asp Ser Val  
50 55 60  
Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Lys Asn Thr Leu Tyr  
65 70 75 80  
Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val Tyr Tyr Cys  
85 90 95  
Ala Arg Xaa Xaa Thr Ile Phe Gly Val Val Ile Asp Tyr Trp Gly Gln  
100 105 110  
Gly Thr Leu Val Thr Val Ser Ser Ala  
115 120

<210> 143  
<211> 118  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> 99, 100  
<223> Xaa = Any Amino Acid

<400> 143  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg Xaa Xaa Tyr Tyr Gly Met Asp Val Trp Gly Gln Gly Thr Thr  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 144  
<211> 117  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> 99, 100, 101  
<223> Xaa = Any Amino Acid

<400> 144  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg Xaa Xaa Xaa Ala Phe Asp Ile Trp Gly Gln Gly Thr Met Val  
100 105 110  
Thr Val Ser Ser Ala  
115

<210> 145  
<211> 118  
<212> PRT  
<213> Homo sapiens

<400> 145  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
20 25 30  
Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Arg His Ser Gly Ser Tyr Phe Asp Tyr Trp Gly Gln Gly Thr Leu  
100 105 110  
Val Thr Val Ser Ser Ala  
115

<210> 146  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 146  
Arg Ala Ser Gln Ser Val Ser Ser Arg Tyr Leu Ala  
1 5 10

<210> 147  
<211> 7  
<212> PRT

<213> Homo sapiens

<400> 147

Gly Ala Ser Ser Arg Ala Thr  
1 5

<210> 148

<211> 9

<212> PRT

<213> Homo sapiens

<400> 148

Gln Gln Tyr Gly Ser Ser Gln Ile Thr  
1 5

<210> 149

<211> 11

<212> PRT

<213> Homo sapiens

<400> 149

Arg Ala Ser Gln Gly Ile Ser Asn Asp Leu Ala  
1 5 10

<210> 150

<211> 7

<212> PRT

<213> Homo sapiens

<400> 150

Ala Ala Ser Ser Leu Gln Ser  
1 5

<210> 151

<211> 9

<212> PRT

<213> Homo sapiens

<400> 151

Leu Gln His Asn Ser Tyr Pro Leu Thr  
1 5

<210> 152

<211> 11

<212> PRT

<213> Homo sapiens

<400> 152

Arg Ala Ser Gln Gly Ile Arg Asn Asp Leu Gly  
1 5 10

<210> 153  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 153  
Ala Ala Ser Ser Leu Gln Ser  
1 5

<210> 154  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 154  
Leu Gln His Asn Ile Tyr Pro Leu Thr  
1 5

<210> 155  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 155  
Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu  
1 5 10 15  
Thr

<210> 156  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 156  
Trp Ala Ser Thr Arg Glu Ser  
1 5

<210> 157  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 157  
Gln Gln Tyr Tyr Ser Thr Pro Arg Thr  
1 5

<210> 158  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 158  
Arg Ala Ser Gln Ser Val Ser Ser Arg Tyr Leu Ala  
1 5 10

<210> 159  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 159  
Gly Ala Ser Ser Arg Ala Ala  
1 5

<210> 160  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 160  
Gln Gln Cys Asp Tyr Ser Pro Pro Cys Ser  
1 5 10

<210> 161  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 161  
Arg Ala Ser Gln Ser Val Arg Lys Ser Tyr Leu Ala  
1 5 10

<210> 162  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 162  
Gly Ala Ser Ser Arg Ala Thr  
1 5

<210> 163  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 163  
Gln Gln Tyr Asp Tyr Ser Pro Ile Thr  
1 5

<210> 164  
<211> 17

<212> PRT  
<213> Homo sapiens

<400> 164  
Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu  
1 5 10 15  
Ala

<210> 165  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 165  
Trp Ala Ser Thr Arg Glu Ser  
1 5

<210> 166  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 166  
Gln Gln Tyr Tyr Ser Thr Pro Arg Thr  
1 5

<210> 167  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 167  
Arg Ser Ser Gln Ser Leu Leu Gln Ser Asn Gly Tyr Lys Tyr Leu Glu  
1 5 10 15

<210> 168  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 168  
Leu Gly Ser Asn Arg Ala Ser  
1 5

<210> 169  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 169  
Met Gln Ala Leu Gln Thr Pro Leu Thr

1

5

<210> 170  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 170  
Arg Ala Ser Gln Ser Val Ser Ser Asn Leu Ala  
1 5 10

<210> 171  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 171  
Gly Ala Ser Thr Arg Ala Thr  
1 5

<210> 172  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 172  
Gln Gln Tyr Asn Asn Trp Pro Pro Cys Ser  
1 5 10

<210> 173  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 173  
Arg Ala Ser Gln Ser Val Ser Arg Ile Leu Ala  
1 5 10

<210> 174  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 174  
Gly Ala Ser Thr Arg Ala Thr  
1 5

<210> 175  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 175  
Gln Gln Tyr His Asn Trp Pro Ile Thr  
1 5

<210> 176  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 176  
Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp  
1 5 10 15

<210> 177  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 177  
Leu Gly Ser Asn Arg Ala Ser  
1 5

<210> 178  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 178  
Met Gln Ala Leu Gln Thr Pro Phe Thr  
1 5

<210> 179  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 179  
Gln Ala Ser Gln Asp Ile Ser Asn Tyr Leu Asn  
1 5 10

<210> 180  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 180  
Asp Ala Ser Asn Leu Glu Thr  
1 5

<210> 181

<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 181  
Gln Gln Tyr Asp Asn Leu Pro Ile Thr  
1 5

<210> 182  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 182  
Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Tyr Phe Leu  
1 5 10 15  
Ala

<210> 183  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 183  
Trp Ala Ser Thr Arg Glu Ser  
1 5

<210> 184  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 184  
Gln Gln Tyr Tyr Ser Ser Pro Trp Thr  
1 5

<210> 185  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 185  
Lys Ser Ser Gln Ser Val Leu Tyr Arg Ser Asn Asn Lys Asn Phe Leu  
1 5 10 15  
Ala

<210> 186  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 186  
Trp Ala Ser Thr Arg Glu Ser  
1 5

<210> 187  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 187  
Gln Gln His Tyr Ser Ile Pro Leu Thr  
1 5

<210> 188  
<211> 17  
<212> PRT  
<213> Homo sapiens

<400> 188  
Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Asn Lys Asn Tyr Leu  
1 5 10 15  
Ala

<210> 189  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 189  
Trp Ala Ser Thr Arg Asp Ser  
1 5

<210> 190  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 190  
Gln Gln Tyr Tyr Ser Thr Pro Arg Thr  
1 5

<210> 191  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 191  
Arg Ala Ser Gln Gly Ile Arg Asn Asp Leu Ala  
1 5 10

<210> 192  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 192  
Ala Ala Ser Ser Leu Gln Ser  
1 5

<210> 193  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 193  
Leu Gln His Asn Ser Tyr Pro Pro Thr  
1 5

<210> 194  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 194  
Arg Ala Ser Gln Ser Val Ser Ser Ser Tyr Leu Ala  
1 5 10

<210> 195  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 195  
Gly Ala Ser Ser Arg Ala Thr  
1 5

<210> 196  
<211> 10  
<212> PRT  
<213> Homo sapiens

<400> 196  
Gln His Tyr Gly Ser Leu Pro Pro Cys Ser  
1 5 10

<210> 197  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 197

Lys Ser Ser Gln Ser Leu Leu Tyr Ser Asp Gly Lys Thr Tyr Leu Tyr  
1 5 10 15

<210> 198

<211> 7

<212> PRT

<213> Homo sapiens

<400> 198

Glu Val Ser Asn Arg Phe Ser  
1 5

<210> 199

<211> 9

<212> PRT

<213> Homo sapiens

<400> 199

Met Gln Ser Ile Gln Leu Pro Leu Thr  
1 5

<210> 200

<211> 17

<212> PRT

<213> Homo sapiens

<400> 200

Lys Ser Ser Gln Ser Val Leu Phe Arg Ser Asn Asn Arg Asn Tyr Leu  
1 5 10 15

Ala

<210> 201

<211> 7

<212> PRT

<213> Homo sapiens

<400> 201

Trp Ala Ser Thr Arg Glu Ser  
1 5

<210> 202

<211> 9

<212> PRT

<213> Homo sapiens

<400> 202

Gln Gln Tyr Tyr Ser Ile Pro Arg Thr  
1 5

<210> 203

<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 203  
Lys Ser Ser Gln Ser Leu Leu His Ser Asp Gly Lys Thr Tyr Leu Tyr  
1 5 10 15

<210> 204  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 204  
Glu Val Ser Asn Arg Phe Ser  
1 5

<210> 205  
<211> 9  
<212> PRT  
<213> Homo sapiens

<400> 205  
Met Gln Ser Ile Gln Leu Pro Leu Thr  
1 5

<210> 206  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 206  
Arg Ser Ser Gln Ser Leu Leu His Ser Asn Gly Tyr Asn Tyr Leu Asp  
1 5 10 15

<210> 207  
<211> 7  
<212> PRT  
<213> Homo sapiens

<400> 207  
Leu Gly Ser Asn Arg Ala Ser  
1 5

<210> 208  
<211> 8  
<212> PRT  
<213> Homo sapiens

<400> 208  
Met Gln Ala Leu Gln Thr Ile Thr  
1 5

<210> 209  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 209  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr  
20 25 30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Ile  
85 90 95  
Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg  
100 105

<210> 210  
<211> 109  
<212> PRT  
<213> Homo sapiens

<400> 210  
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly  
1 5 10 15  
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser  
20 25 30  
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu  
35 40 45  
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser  
50 55 60  
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu  
65 70 75 80  
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro  
85 90 95  
Leu Thr Phe Gly Gly Thr Lys Val Glu Ile Lys Arg  
100 105

<210> 211  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 211  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Gly Ile Arg Asn Asp  
20 25 30  
Leu Gly Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Arg Leu Ile

35	40	45
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly		
50	55	60
Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro		
65	70	75
Glu Asp Phe Ala Thr Tyr Tyr Cys Leu Gln His Asn Ser Tyr Pro Pro		
85	90	95
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg		
100	105	

<210> 212  
<211> 113  
<212> PRT  
<213> Homo sapiens

<400> 212		
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly		
1	5	10
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser		
20	25	30
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser		
35	40	45
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro		
50	55	60
Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile		
65	70	75
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala		
85	90	95
Leu Gln Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys		
100	105	110
Arg		

<210> 213  
<211> 110  
<212> PRT  
<213> Homo sapiens

<400> 213		
Glu Ile Val Leu Thr Gln Ser Pro Gly Thr Leu Ser Leu Ser Pro Gly		
1	5	10
Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser Val Ser Ser Ser		
20	25	30
Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro Arg Leu Leu		
35	40	45
Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly Ile Pro Asp Arg Phe Ser		
50	55	60
Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Arg Leu Glu		
65	70	75
Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln Gln Tyr Gly Ser Ser Pro		
85	90	95
Pro Phe Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg		
100	105	110

<210> 214  
<211> 108  
<212> PRT  
<213> Homo sapiens

<400> 214  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr  
20 25 30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile  
35 40 45  
Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg Phe Ser Gly  
50 55 60  
Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro  
65 70 75 80  
Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser Thr Pro Pro  
85 90 95  
Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg  
100 105

<210> 215  
<211> 112  
<212> PRT  
<213> Homo sapiens

<400> 215  
Asp Ile Val Met Thr Gln Ser Pro Leu Ser Leu Pro Val Thr Pro Gly  
1 5 10 15  
Glu Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Leu His Ser  
20 25 30  
Asn Gly Tyr Asn Tyr Leu Asp Trp Tyr Leu Gln Lys Pro Gly Gln Ser  
35 40 45  
Pro Gln Leu Leu Ile Tyr Leu Gly Ser Asn Arg Ala Ser Gly Val Pro  
50 55 60  
Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile  
65 70 75 80  
Ser Arg Val Glu Ala Glu Asp Val Gly Val Tyr Tyr Cys Met Gln Ala  
85 90 95  
Leu Gln Thr Ile Thr Phe Gly Gln Gly Thr Arg Leu Glu Ile Lys Arg  
100 105 110

<210> 216  
<211> 111  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> 43, 44, 45, 46  
<223> Xaa = Any Amino Acid

<400> 216  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr  
     20                       25                       30  
 Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Xaa Xaa Xaa Xaa Pro Lys  
     35                       40                       45  
 Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg  
     50                       55                       60  
 Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser  
     65                       70                       75                       80  
 Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser  
     85                       90                       95  
 Thr Pro Pro Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg  
     100                       105                       110

<210> 217  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 217  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
     1                       5                       10                       15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Thr Ser Tyr  
     20                       25                       30  
 Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
     35                       40                       45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
     50                       55                       60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
     65                       70                       75                       80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
     85                       90                       95  
 Ala Arg Trp Gly Gln Gly Thr Met Val Thr Val Ser Ser Ala  
     100                       105                       110

<210> 218  
 <211> 110  
 <212> PRT  
 <213> Homo sapiens

<400> 218  
 Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
     1                       5                       10                       15  
 Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe Ile Ser Tyr  
     20                       25                       30  
 Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
     35                       40                       45  
 Gly Ile Ile Tyr Pro Gly Asp Ser Asp Ala Arg Tyr Ser Pro Ser Phe  
     50                       55                       60  
 Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
     65                       70                       75                       80  
 Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
     85                       90                       95  
 Ala Arg Thr Thr Gln Asp Thr Met Val Thr Val Ser Ser Ala  
     100                       105                       110

<210> 219  
<211> 110  
<212> PRT  
<213> Homo sapiens

<400> 219  
Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys Pro Gly Glu  
1 5 10 15  
Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Asn Phe Ile Thr Tyr  
20 25 30  
Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu Glu Trp Met  
35 40 45  
Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser Pro Ser Phe  
50 55 60  
Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser Thr Ala Tyr  
65 70 75 80  
Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met Tyr Tyr Cys  
85 90 95  
Ala Leu Trp Gly Gln Arg Thr Met Glu Thr Val Ser Ser Ala  
100 105 110

<210> 220  
<211> 111  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT  
<222> 44, 45, 46  
<223> Xaa = Any Amino Acid

<400> 220  
Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr  
20 25 30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Xaa Xaa Xaa Pro Lys  
35 40 45  
Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg  
50 55 60  
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser  
65 70 75 80  
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Ser  
85 90 95  
Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg  
100 105 110

<210> 221  
<211> 111  
<212> PRT  
<213> Homo sapiens

<220>  
<221> VARIANT

<222> 44, 45, 46

<223> Xaa = Any Amino Acid

<400> 221

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Ser Ser Tyr  
20 25 30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Xaa Xaa Xaa Pro Lys  
35 40 45  
Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Ser Gly Val Pro Ser Arg  
50 55 60  
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser  
65 70 75 80  
Leu Gln Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Tyr Asn  
85 90 95  
Thr Pro Pro Thr Phe Gly Gln Gly Thr Lys Val Glu Ile Lys Arg  
100 105 110

<210> 222

<211> 111

<212> PRT

<213> Homo sapiens

<400> 222

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly  
1 5 10 15  
Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Gln Ser Ile Gly Ser Tyr  
20 25 30  
Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Pro Gly Lys Gly Pro Lys  
35 40 45  
Leu Leu Ile Tyr Ala Ala Ser Ser Leu Gln Thr Gly Val Pro Ser Arg  
50 55 60  
Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser Ser  
65 70 75 80  
Leu Arg Pro Glu Asp Phe Ala Thr Tyr Tyr Cys Gln Gln Ser Phe Asn  
85 90 95  
Thr Pro Pro Thr Phe Gly Pro Gly Thr Lys Val Asp Ile Lys Arg  
100 105 110